

printer being capable of printing on first and second recording sheets, a width of said first recording sheet being larger than a width of said second recording sheet, said sheet lateral edge detector comprising:

5        a first light receiving window having a region while a lateral edge of said first recording sheet moves across during transport thereof;

10      a first photo sensor for receiving light passed through said first light receiving window partially shielded by said lateral edge of said first recording sheet;

      a second light receiving window having a region which a lateral edge of said second recording sheet moves across during transport thereof;

15      a second photo sensor for receiving light passed through said second light receiving window partially shielded by said lateral edge of said second recording sheet;

20      a recording head for printing on said first or second recording sheet on line-by-line basis extending in said widthwise direction, said recording head having a length larger than said width of said first recording sheet;

      a shielding device for shielding said second light receiving window in printing on said first recording sheet, and for shielding said first light receiving window in printing on said second receiving sheet; and

25      a judging device for judging the position of said lateral edge of said first or second recording sheet from the difference signal between output signals of the first and second photo sensors.

What is claimed is:

1. A sheet lateral edge detector comprising:  
a light receiving window having a region which a lateral  
5 edge of a recording sheet moves across;  
a first photo sensor for measuring light passing through  
said light-receiving window partially shielded by said lateral  
edge of said recording sheet;  
a second photo sensor disposed away from the first photo  
10 sensor in a widthwise direction of said recording sheet, for  
measuring dark current; and  
a judging device for judging the position of said lateral  
edge of said recording sheet from the difference signal between  
output signals of the first and second photo sensors.

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2. A sheet lateral edge detector as claimed in claim  
1, further comprising a recording head, for performing line  
print of the image on said recording sheet, wherein said first  
and second photo sensors are attached to said recording head,  
20 wherein said recording sheet is moved relative to said recording  
head.

- 25 3. A sheet lateral edge detector as claimed in claim  
2, further comprising a head cover slantly attached to said  
recording head, for guiding said recording sheet, wherein said  
light receiving window is formed on said head cover.

4. A sheet lateral edge detector for a printer, said

5. A sheet lateral edge detector as claimed in claim 4, wherein said recording head is a thermal head on which a plurality of heat emitting elements are aligned.

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6. A sheet lateral edge detector as claimed in claim 5, wherein said first and second photo sensors are aligned near said recording head and in parallel therewith.

10 7. A sheet lateral edge detector as claimed in claim 6, wherein said first and second light receiving windows are in a slit form inclined with respect to a direction of said transport of said first or second recording sheet.

15 8. A sheet lateral edge detector as claimed in claim 7, further including a head cover, secured by said thermal head, for guiding said first and second recording sheets, said first and second light receiving windows being formed on said head cover.

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9. A sheet lateral edge detector as claimed in claim 8, wherein said first and second photo sensors are attached to said thermal head.

25 10. A sheet lateral edge detector as claimed in claim 9, wherein said first recording sheet is functioned as said shielding device in printing on said first recording sheet.

11. A sheet lateral edge detector as claimed in claim 10, further comprising a shielding shutter for opening and shutting said first light receiving window, functioned as said shielding device in printing on said second recording sheet.

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12. A sheet lateral edge detector as claimed in claim 7, wherein said shielding device includes a first mask plate provided with said first light receiving window and a second mask plate provided with said second light receiving window, 10 wherein said first mask plate is set between said first recording sheet and said first and second sensors in printing on said first recording sheet, wherein said second mask plate is set between said second recording sheet and said first and second sensors in printing on said second recording sheet.

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13. A sheet lateral edge detector as claimed in claim 12, further comprising a head cover secured to said thermal head, for guiding said first and second recording sheets, said head cover having a transparent part for selectively setting said 20 first and second mask plates.